EARTHWATTS 750 GREEN

POWER SUPPLY

USER'S MANUAL

USER'S MANUAL
EARTHWATTS SERIES
EA-750 GREEN POWER SUPPLY

THE ENERGY-EFFICIENT PSU

Get more power and lower your electric bill with the new EarthWatts Green series! One of the most environmentally-friendly power supplies available, the EarthWatts EA-750 Green efficiently delivers 750 Watts of reliable Continuous Power while meeting the Bronze level of efficiency from 80 PLUS®, the most widely recognized independent standard in power supply efficiency. On top of that, this EarthWatts power supply offers Universal Input to automatically work on any power grid on the planet, and a 135 mm double ball bearing fan to keep cool.
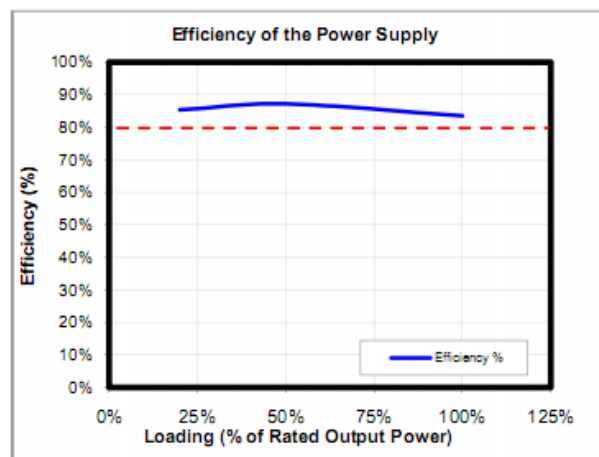
STANDARDS AND FEATURES

The EA-750 Green PSU is compatible with ATX12V v2.3 and EPS12V v2.91 specifications. This PSU features Universal Input, which automatically senses when you connect the power supply to any AC power source between 100 ~ 240V, eliminating the need to set a voltage switch. The EA-750 Green also features Active Power Factor Correction (Active PFC), which improves the power factor value of the PSU by altering the input current wave shape, helping to transmit energy across the grid.

SYSTEM PROTECTION

A variety of industrial-grade safety circuitry will help protect your computer: OCP (Over Current Protection), OVP (Over Voltage Protection), SCP (Short Circuit Protection), OPP (Over Power Protection) OTP (Over Temperature Protection) and SIP (Surge & Inrush Protection). Sometimes the PSU will "latch" into a protected shutdown state. This means that you will need to power off the PSU and clear the fault before it will function again. There are no user-replaceable fuses in your EA-750 Green.

80 PLUS® BRONZE CERTIFICATION

80 PLUS® Bronze certification is among the highest independent standards in power supply efficiency. This allows the PSU to use less energy and generate less heat so it stays cooler, runs more quietly, and lasts longer. The EA-750 Green has been certified to be at least 82% efficient at a wide range of operating loads and will lower your operating costs while protecting the environment.

Source: 80 PLUS Verification and Testing Report

QUAD +12 VOLT RAIL DISTRIBUTION

The EA-750 Green PSU uses quad +12 volt power rails. Different connectors are hooked up to separate circuits to aid in the balanced distribution of power between devices in your computer. The +12V rails have been assigned to different connectors, as shown in Table 2, to prevent voltage sags in one device due to sudden demands for power by another device.

TABLE 2: POWER CONNECTORS AND RAIL ASSIGNMENTS

Power Connectors	Description	+12V Rail
	24(20+4)-pin main connector	1
	1 x 8(4+4)-pin ATX12V / EPS12V	2
	2 x 8(6+2)-pin PCI-E (yellow/blue)	3
	2 x 8(6+2)-pin PCI-E (yellow/green)	4
	6 x Molex	1
	9 x SATA	1
	Floppy	1

POWER OUTPUT

The EA-750 Green PSU distributes a varying maximum number of amps on each rail. To see the output capacity and regulation for each different voltage, see Table 3.

TABLE 3: OUTPUT CAPACITY AND REGULATION

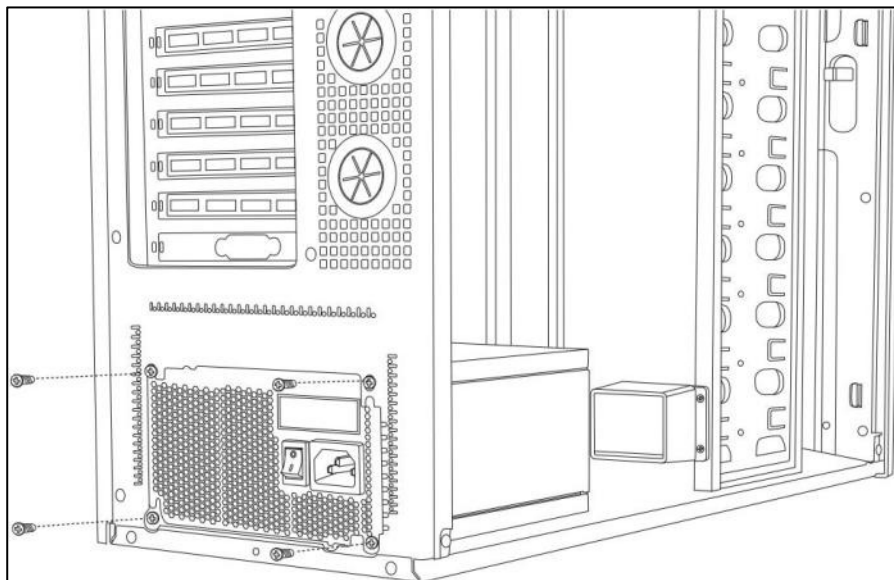| Output Voltage	Load Max.	Regulation	Ripple & Noise
+3.3V	25A	±5%	50 mV
+5V	25A	±5%	50 mV
+12V$_1$	40A	±5%	120 mV
+12V$_2$	40A	±5%	120 mV
+12V$_3$	40A	±5%	120 mV
+12V$_4$	40A	±5%	120 mV
−12V	0.5A	±10%	120 mV
+5Vsb	3A	±5%	50 mV

The continuous maximum total output power shall not exceed 750W.

+12V$_{1-4}$ DC maximum output power shall not exceed 750W.

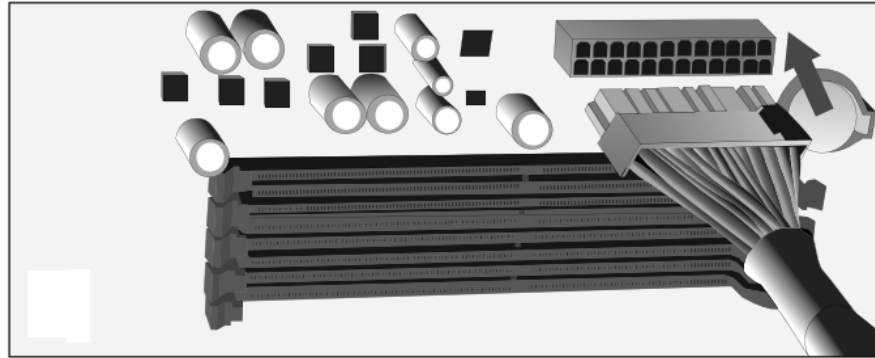+3.3V and +5V DC maximum combined output power shall not exceed 150W.

INSTALLATION:

1. Install the EA-750 Green PSU into your case with the four screws provided.
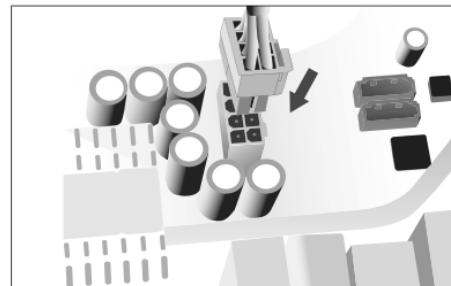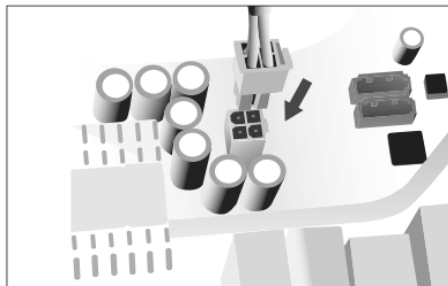
2. Connect the 24-pin main power connector to your motherboard. If your motherboard uses a 20-pin connector, detach the 4-pin attachment on the 24-pin connector.
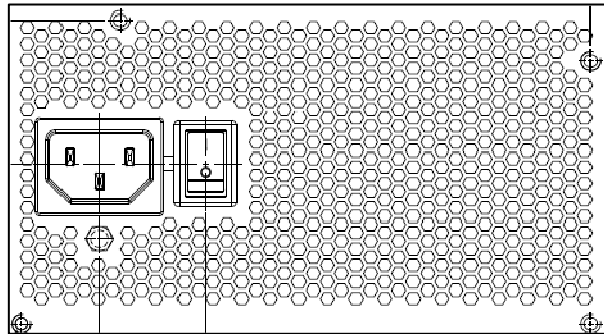**Note:** The detachable 4-pin section cannot be used in place of a 4-pin +12V connector.

3. Connect the 8-pin or 4-pin ATX12V connector for the CPU to the appropriate connector on your motherboard. If your motherboard has an 8-pin socket with a cover on some of the openings, we recommend that you remove the cover and use the 8-pin connector.
Note: Please also refer to your motherboard user's manual for any special instructions.

4. Connect the PCI-E connector(s) to your graphics card(s), if applicable. PCI-E graphics cards use different amounts of power. For some, a single 6-pin connector is sufficient, while more powerful cards use multiple connectors, including the advanced 8-pin PCI-E connector. The 8-pin PCI-E connectors on the EA-750 Green can be used as either 6- or 8-pin connectors.

5. Connect all Molex/SATA connector(s) to your hard drives, optical drives (CD/DVD/BluRay™) and other accessories. Please note that some devices will use either the older 4-pin Molex connectors, while others will use the newer 15-pin SATA connector. 4-pin Molex connectors have two black wires, a yellow, and a red. The SATA connector has an additional orange power wire.

6. Connect your floppy drive (if present) using the supplied FDD connector shown in Table 2.

7. Connect an AC power cord to the power supply AC inlet. Turn the switch to the "|" position after you have connected all the devices and are ready to turn on your computer.

Antec, Inc.
47900 Fremont Blvd.
Fremont, CA 94538
tel: 510-770-1200
fax: 510-770-1288

Antec Europe B.V.
Stuttgartstraat 12
3047 A Rotterdam
Netherlands
tel: +31 (0) 10 462-2060
fax: +31 (0) 10 437-1752

Technical Support:
US & Canada
1-800-22ANTEC
customersupport@antec.com

Europe
+49-40-226-139-2
europe.techsupport@antec.com

www.antec.com